

I hereby certify that this paper is being facsimile
transmitted to the United States Patent and
Trademark Office on the date shown below:

19 DECEMBER 2001

Jeff Lloyd #35,589
Jeff Lloyd, Patent Attorney

Patent Application
Docket No. UF-155CD1
Serial No. 09/070,844

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Ousama Zaghmout
Art Unit : 1649
Applicants(s) : Robert R. Schmidt, Philip Miller
Serial No. : 09/070,844
Filed : May 1, 1998
For : Novel Polypeptides and Polynucleotides Relating to the α - and β -Subunits
of Glutamate Dehydrogenases and Methods of Use

Assistant Commissioner for Patents
Washington, D.C. 20231

COMMUNICATION

Sir:

Applicants wish to note for the record that the first complete bacterial GDH sequence was published in 1983: McPherson, M.J., and Wootton, J.C. (1983), "Complete nucleotide sequence of the *Escherichia coli* *gdhA*," *Nucleic Acids Research* 11:5257-5266. The first fungal GDH sequence was published in 1983: Kinnaird, J.H., and Fincham, J.R.S. (1983) "The complete nucleotide sequence of the *Neurospora crassa* *am* (NADP-specific glutamate dehydrogenase) gene," *Gene* 26:253-260.

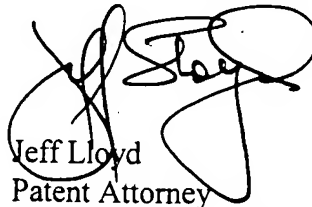
Applicants file herewith a copy of a GENBANK search that lists most or all of the GDH genes publicly known and available as of March 1995, before the priority date of this application.

In view of the foregoing, Applicants believe the claims as currently pending are in condition for allowance, and such action is respectfully requested.

The Commissioner is authorized to charge any fees under 37 C.F.R. § 1.16 or 1.17 as required by this paper to Deposit Account 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this Communication, or if Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



Jeff Lloyd

Patent Attorney

Registration No. 35,589

Phone No.: 407-426-7500

Address : 2421 N.W. 41st Street, Suite A-1
Gainesville, Florida 32606-6669

JL/gm

Attachment: Copy of GENBANK search

RCCCV1::JWEDWA

JOB 941

GDH.SEARCH;5707

File: DSA100:[NETUSER.NP]GDH.SEARCH;5707
Owner UIC: SYSTEM
Account: OPSYS

Priority: 100
Submit queue: AA320AS1
Submitted: 20-MAR-1995 14:03:03.68
Printer name: AA320LW1 IINTX@CV AA3
Executor queue: AA320AS1
VMS node: RCCCV1
Data Format: TEXT
Form: LTR_12

Digital Equipment Corporation

VAXshare Print Server R1.2-EP02

VAX/VMS V5.5-2

GENGENBANKDISK:[GENBANK]GB_BA.SEQCAT;87

Aspargc	X65511	Anabaena sp. argC gene for N-acetylglutamate semialdehyde dehydrog
Bsargcn	X52834	B.subtilis argC gene for N-acetyl-glutamate-gamma-semialdehyde de
Cloglud	M65250	C.difficile glutamate dehydrogenase gene, complete cds. 5/91 1,266
Clogsdhg	Z11747	C.symbiosum gdh gene encoding glutamate dehydrogenase. 6/93 1,636t
Ecgdha	X00988	E. coli gdha gene for NADP-specific glutamate dehydrogenase (EC1.4
Ecoargbch	M21446	E.coli N-acetylglutamate-gamma-semialdehyde dehydrogenase (argC) an
Ecogdha	J01615	E.coli gdha gene coding for NADP-specific glutamate dehydrogenase.
Ecogdhak	K02499	E. coli gdha gene encoding NADP-dependent glutamate dehydrogenase,
Hsgdhagd	X63837	H.salinarium GDHA gene for NADP-dependent glutamate dehydrogenase.
Kpngdhaa	M30538	K.aerogenes glutamate dehydrogenase (gdha) gene, 5' end. 9/90 480t
Pepglud	M76403	P.asaccharolyticus glutamate dehydrogenase gene, complete cds. 10/
Poybaccsa	L07290	Porphyromonas (Bacteroides) gingivalis NAD-dependent glutamate de
Pywgdh	M97860	Pyrococcus furiosus glutamate dehydrogenase (gdh) gene, complete c
Ssgdha	X73990	S.shibatae gene for glutamate dehydrogenase. 5/94 1,192bp
Stygdha	M24021	S.typhimurium glutamate dehydrogenase (GDHA) gene, complete cds. 3
Thcgludehy	L19995	Thermococcus litoralis (clone TL211) glutamate dehydrogenase (gdh)
Xxgdh	X16399	Gene for glutamate dehydrogenase (EC 1.4.1.4), put. bacterial orig
xyxgldh	L19115	Hyperthermophilic archaeobacterial sp. (G1-H) glutamate dehydroge
Yyxgldha	L19116	Hyperthermophilic Archaeobacterial species (GE5) glutamate dehydroc
Yyxgludh	L12408	Hyperthermophilic Archaeobacterial sp. glutamate dehydrogenase (gc

GENGENBANKDISK:[GENBANK]GB_CU.SEQCAT;2

Aspargc	X65511	Anabaena sp. argC gene for N-acetylglutamate semialdehyde dehydrog
Cloglud	M65250	C.difficile glutamate dehydrogenase gene, complete cds. 3/95 1,266
Mzegd	D49475	Corn mRNA for glutamate dehydrogenase. 3/95 1,621bp
T69765	T69765	yd14c07.s1 Homo sapiens cDNA clone 108204 3' similar to gb:M20867
T70750	T70750	yd14c07.r1 Homo sapiens cDNA clone 108204 5' similar to gb:M20867
T79368	T79368	yd74f05.r1 Homo sapiens cDNA clone 113985 5' similar to gb:M20867
T79369	T79369	yd74f06.r1 Homo sapiens cDNA clone 113987 5' similar to gb:M20867
T79799	T79799	yd74f05.s1 Homo sapiens cDNA clone 113985 3' similar to gb:M20867
T79800	T79800	yd74f06.s1 Homo sapiens cDNA clone 113987 3' similar to gb:M20867
T84419	T84419	yd45h12.r1 Homo sapiens cDNA clone 111239 5' similar to gb:M20867
T85275	T85275	yd45h12.s1 Homo sapiens cDNA clone 111239 3' similar to gb:M20867
T85958	T85958	yd62b05.r1 Homo sapiens cDNA clone 112785 5' similar to gb:M20867
T86978	T86978	yd62b05.s1 Homo sapiens cDNA clone 112785 3' similar to gb:M20867

GENGENBANKDISK:[GENBANK]GB_IN.SEQCAT;87

Dmglud1	Z29062	D.melanogaster GLUD mRNA for glutamate dehydrogenase. 3/94 2,152bp
Dmglud2	Z28976	D.melanogaster GLUD gene for glutamate dehydrogenase exon 1. 3/94
Dmglud3	Z28977	D.melanogaster GLUD gene for glutamate dehydrogenase, 3' exon 4. 3
Dmglud4	Z28978	D.melanogaster GLUD gene for glutamate dehydrogenase, promoter reg
Dmglud5	Z29063	D.melanogaster GLUD gene for glutamate dehydrogenase, intron1/exon
Dmglud6	Z28979	D.melanogaster GLUD gene for glutamate dehydrogenase, exons 2 and
Dmglud7	Z28980	D.melanogaster GLUD gene for glutamate dehydrogenase, exons 3,4(2C
Gianadpdgh	M84604	Giardia lamblia NADP-dependent glutamate dehydrogenase (NADP-GDH)

GENGENBANKDISK:[GENBANK]GB_PL.SEQCAT;87

Aku02505	U02505	Achlya klebsiana NAD-specific glutamate dehydrogenase gene, comple
Angdha	X16121	Aspergillus nidulans gdha gene for NADP-linked glutamate dehydroge
Csgdhanc	X58831	C.sorokiniana gdhANC gene for NADP-specific glutamate dehydrogenas
Neuam	K01653	N.crassa am gene coding for NADP specific GDH (glutamate dehydrog
Neuamg	K01409	N.crassa am (NADP-specific glutamate dehydrogenase) gene & flanks.
Neunadspec	L20497	Neurospora crassa (clones pvg1 and pvg2) NAD-specific glutamate de
S64476-	S64476	NADP-dependent glutamate dehydrogenase [Schwanniomycetes occidentali
S66039	S66039	gdh=NAD(+)-specific glutamate dehydrogenase [Neurospora crassa, Ge
S66436	S66436	GDH2=NAD-linked glutamate dehydrogenase (5' region) [Saccharomyces
Ssgdh2a	X72015	S.cerevisiae GDH2 gene for NAD-glutamate dehydrogenase. 10/93 4,83

BEST AVAILABLE COPY

Yscgdhm M11297 Yeast (*S. cerevisiae*) GDH1 gene encoding NADPH-dependent glutamate
Yscgdhn M10590 Yeast (*S. cerevisiae*) GDH1 gene encoding NADPH-dependent glutamate

GENGENBANKDISK: [GENBANK]GB_PR.SEQCAT;87

Hsgdh12a	X53144 Human GDH1 gene for glutamate dehydrogenase (exon 2). 9/90 81bp
Hsgdh13a	X53145 Human GDH1 gene for glutamate dehydrogenase (exon 3) (EC 1.4.1.3.).
Hsgdh14a	X53146 Human GDH1 gene for glutamate dehydrogenase (exon 4) (EC 1.4.1.3.).
Hsgdh22b	X53147 Human GDH2 gene for glutamate dehydrogenase (exon 2) (EC 1.4.1.3.).
Hsgdh23b	X53148 Human GDH2 gene for glutamate dehydrogenase (exon 3) (EC 1.4.1.3.).
Hsgdh24b	X53149 Human GDH2 gene for glutamate dehydrogenase (exon 4) (EC 1.4.1.3.).
Hsgdhr	X07674 Human mRNA for glutamate dehydrogenase (EC 1.4.1.3., GDH). 12/94 2
Hsglud1	X07769 Human mRNA for glutamate dehydrogenase (Glud-1, EC 1.4.1.3.). 9/93
Hsglud11	X66300 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 1). 12/94 1
Hsglud110	X66308 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 10). 2/93 3
Hsglud111	X66309 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 11). 2/93 4
Hsglud112	X66311 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 12). 2/93 2
Hsglud113	X66312 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 13). 12/94
Hsglud12	X66301 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 2). 2/93 21
Hsglud13	X66302 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 3). 2/93 24
Hsglud14	X66303 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 4). 2/93 18
Hsglud15	X66304 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 5). 2/93 35
Hsglud16	X66305 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 6). 2/93 25
Hsglud17	X66306 H.sapiens GLUD1 gene for glutamate dehydrogenase (exons 7 and 8).
Hsglud19	X66307 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 9). 2/93 20
Hsgludp1	X66310 H.sapiens GLUDP1 gene for glutamate dehydrogenase. 2/93 3,271bp
Hsgludp3	X66316 H.sapiens GLUDP3 gene for glutamate dehydrogenase (exon 2). 6/94 2
Hsgludp5	X67491 H.sapiens gene for glutamate dehydrogenase. 7/93 2,679bp
Hsgtgdh	X69219 H.sapiens polymorphic repeat associated with glutamate dehydrogenase
Hsu08997	U08997 Human glutamate dehydrogenase gene, complete cds. 8/94 3,272bp
Humgdh	J03248 Human liver glutamate dehydrogenase mRNA, complete cds. 11/94 2,95
Humgdha	M17697 Human glutamate dehydrogenase mRNA. 11/94 828bp
Humgdhax	M37154 Human glutamate dehydrogenase (GDH) mRNA, complete cds. 11/94 2,95
Humgdh1	M20867 Human glutamate dehydrogenase (GDH) mRNA, complete cds. 11/94 3,05
Humgdhr	M18377 Human glutamate dehydrogenase (GDH) mRNA, complete cds. 11/94 2,970
S60495	S60495 GLUD1=glutamate dehydrogenase (5' region) [human, Genomic, 802 nt]
S60496s1	S60496 GLUD1=glutamate dehydrogenase (exons 2,3 and 4) [human, Genomic, 2
S60496s2	S60497 GLUD1=glutamate dehydrogenase (exons 2,3 and 4) [human, Genomic, 1
S60496s3	S60498 GLUD1=glutamate dehydrogenase (exons 2,3 and 4) [human, Genomic, 1
S60499	S60499 GLUDP4=glutamate dehydrogenase [human, Genomic, 2087 nt]. 7/93 2,0

GENGENBANKDISK: [GENBANK]GB_RO.SEQCAT;87

Mmgld	X57024 Murine GLUD mRNA for glutamate dehydrogenase. 8/91 2,942bp
Rngdr	X14044 Rat mRNA for glutamate dehydrogenase (EC 1.4.1.3.). 9/93 2,874bp
Rngdr1	X14223 Rat mRNA for glutamate dehydrogenase (EC 1.4.1.3.). 9/93 2,834bp
Rngludeha	X64365 R.norvegicus gene for glutamate dehydrogenase. 8/93 2,168bp

GENEMBLDISK: [EMBL]EM_CU.SEQCAT;2

Asparge	X65511 Anabaena sp. argC gene for N-acetylglutamate semialdehyde dehydrog
Hsgdhr	X07674 Human mRNA for glutamate dehydrogenase (EC 1.4.1.3., GDH). 12/94 2
Hsglud11	X66300 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 1). 12/94 1
Hsglud113	X66312 H.sapiens GLUD1 gene for glutamate dehydrogenase (exon 13). 12/94

BEST AVAILABLE COPY